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Environmental
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Meeting Minutes
Yurok Environmental Monitoring Workgroup
Agricultural Commissioners Office, Eureka, Humboldt County
Tuesday, July 13, 1999

Participants: Bessie Lee, Environmental Program Manager, with Yurok Tribe
John Melvin, Env. Program Tech., Yurok Tribe
Lori Harder, Yurok Tribe
Bernie Bush, Simpson Timber Company
John Pricer, Simpson Timber Company

Ex officio: Kean Goh, Department of Pesticide Regulation
Pam Wofford, Department of Pesticide Regulation
John Falkenstrom, Humboldt County Agricultural Commissioner
Jeff Dolf, Humboldt County Agricultural Commissioner's Office
David Cavyell, Del Norte County Agricultural Commissioner's Office

Bessie Lee opened the meeting by thanking those in attendance and had each person introduce themselves. **Kean Goh** discussed the possibility of doing epidemiology studies and described what they would entail.

Bernie Bush started his discussion with a brief history of herbicide use by Simpson Timber Company. He mentioned that Simpson began aerial application of herbicides in the late 1960's for reforestation. The first alternative to aerial applications involved the use of ground equipment and workers to apply herbicides in the mid-1980's. In the early 1980's Simpson also started a pilot program to look at other alternatives to herbicide applications. They selected 6 typical sprays sites representing different vegetation types. Chainsaw removal of brush was selected as the test method for vegetation control. The study design included cost, efficacy, safety, production, etc. The company concluded that the method was not acceptable as a stand alone alternative to herbicide use. **Bernie** also described a program that Simpson had attempted in the Blue Lake area with a local agency to control blue blossom with manual removal instead of aerial applications of herbicides. The project resulted in increased costs, increased time, and poor efficacy among other problems.

Bernie mentioned that Simpson does have an ongoing program of using alternatives to herbicides when possible. Their thinning program includes a contract for chainsaw cutting of competing vegetation such as blue blossom. **Bernie** explained that the company harvests over 2500 acres each year and the size of the operations makes it physically impossible to rely on manual removal of vegetation. He also noted the results of the studies indicated that the cost of manual control was 4 to 8 times the cost of herbicide control. The site preparation approach that the company is now using to control competing species at the time of planting means lower



application amounts due to less vegetation present, and reduction in the number of aerial applications needed later.

When asked about the costs comparisons, Bernie stated that the chemical costs (including labor) were \$45-\$55/acre for aerial, \$65-\$250/acre for ground applications and mechanical costs ranged from approximately \$200/acre for tractor site preparation to \$160 - \$200/acre for precommercial thinning (cutting brush).

John Melvin asked about an area in Roach Creek which had been yarded off and whether it would be a typical site for chemical application. **John Pricer** noted that the area will be cleared off and sprayed in the fall with preemergent herbicide before planting next spring. He mentioned that it may need to be hand thinned in 4 to 5 years with a "hack and squirt" treatment. He also noted that the use of pre-emergence herbicides usually reduces the need for herbicides later. **John Pricer** said that Oust and atrazine are the main pre-emergent herbicides used by Simpson Timber Co.

Lori Harder asked about the harvest and use of hardwoods by Simpson. **Bernie** stated that harvest of local hardwoods, mainly tan oak and madrone, is not economically feasible. Some small companies are trying to develop a market for tan oak. **Bernie and John** noted that the company does log hardwood but usually to rehabilitate an area that was not reforested after harvest. They area can then be replanted to softwoods.

John Melvin expressed concern about biologists working in the treatment areas, and **Bernie** said that application maps are available to all employees. **John** also noted that hunters have complained that deer are absent from treated areas. **Bernie** replied that deer tend to stay out of an area immediately following an application because of the lack of new growth of vegetation. But deer have become such a problem on the property that protective netting is necessary for new replants. **Bernie** also noted that they receive more applications for permission to hunt than any other neighboring timber company. He mentioned that they have a cooperative agreement with the Yurok tribe for an annual elk hunt. **Bernie** also noted that Fish and Game use chemicals for vegetation management as part of their deer management program. **Bernie** indicated that the animals which cause the most problems are bear, elk and deer.

John Melvin asked about Simpson's program for ceanothus control. **Bernie** stated that Velpar (hexazinone) is the principle chemical for control of ceanothus on the east side of the property, but it can not be used around redwood because of sensitivity.

Lori asked how many acres are cut each year on Simpson property and within the reservation. **Bernie** answered that approximately 2500 acres are cut each year of which 50 to 100 acres are in the reservation boundaries. He stated that most growth in the reservation boundary is still 30 years away from harvest. An estimated 1500 acres are harvested within the ancestral region. **John Melvin** asked about harvest activity in the Pecwan area, to which **John Pricer** replied that there will be heavy logging in the area for the next few years in small scattered areas which were left from previous harvests.

Bessie Lee inquired about trends in results from the water sampling that Simpson has done.

Bernie indicated that, in general, any detections they have found have been in storm runoff samples. He noted that improved equipment which controls drift over water during application has decreased the detections in their samples taken during application. **Bessie** asked about the timing of sampling during an application, and **Bernie** replied that it varies between areas due to flow rate of the stream, distance from application to sample site, etc. **Bernie** noted that almost all of the samples have been below 2 ppb. He explained that storm runoff samples are taken within 30 days of an application with any rainfall that results in a rise in the water level of the stream associated with the application area. The person who collects the sample is from another section of the timber company. The samples go to the North Coast Labs and results are sent to the regional board, Fish and Game, etc. The Regional Water Quality Board also takes samples.

John Pricer stated that the fall herbicide application program will begin in mid-September with aerial applications of Oust and Garlon applications.

Pam Wofford discuss water monitoring and explained that water samples will be collected at application time and during storm runoff similar to sampling during the spring. Plant samples will be collected within an application area, outside the application area, and in the buffer zones along the waterways in an application area. **Bessie** indicated that the workgroup would still like to have sediment and soil samples taken, but have decided to wait on tissue samples. The possibility of doing epidemiological studies was discussed and will be decided at a later meeting.

The next meeting is tentatively scheduled for October 21 to be held at the Pecwan community building.